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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/643,634	08/18/2003	Torbjorn Boson Lundqvist	48304.00017	4442
23767	7590	01/12/2005	EXAMINER	
PRESTON GATES ELLIS & ROUVELAS MEEDS LLP 1735 NEW YORK AVENUE, NW, SUITE 500 WASHINGTON, DC 20006			ALLEN, ANDRE J	
			ART UNIT	PAPER NUMBER
			2855	

DATE MAILED: 01/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/643,634

Applicant(s)

LUNDQVIST, TORBJORN BOSON

Examiner

Andre J. Allen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>11-21-03</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION***Double Patenting***

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-23 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-21 and 26 of U.S. Patent No. 6629454. Although the conflicting claims are not identical, they are not patentably distinct from each other because the cited patent teaches each and every element of the claimed invention. However, the cited patent incorporates the housing into a valve stem contrary to a tire valve as claimed in the application at hand. It would have been obvious to a person having ordinary skill in the art to interpret a tire valve and valve stem as elements that provide the same function providing biasing means for air pumps and pressure sensing devices.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1,5, 8-10 13 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Ballyns.

Regarding claims 1,5,10,13 and 17 Ballyns teaches a pressure differential (col. 6 lines 10-15) sensor including a housing 12 having a first/main pressure chamber 38, a second/counter pressure chamber 40, and a flexible membrane 36, wherein said first and second pressure chambers are separated by a flexible membrane {abstract}; and a signaling means 64 located within said housing, wherein said signaling means emits a warning signal when a pressure within the first pressure chamber is greater than a pressure within the second pressure chamber {abstract} and at least one battery/power supply {col. 6 lines 60-64}.

Regarding claims 8,9 and 14 Ballyns teaches said signaling means is coupled to a printed circuit board {fig. 2} and signaling means is selected from the group consisting of alight emitting diode (LED), a speaker, a

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radio frequency (RF) transmitter, and a infrared (IR) transmitter. {col. 7
lines 1-25} (claims 9 and 21)

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 2-4,6,7,11,12,15 and 16 rejected under 35 U.S.C. 103(a) as being unpatentable over Ballyns in view of Chi.

Regarding claim 2 Ballyns does not teach a lens, a main housing, and a lower housing, wherein said lens is coupled to a first end of said main housing and said lower housing is coupled to a second end of said housing. Chi teaches a lens 1 (abstract), a main housing 2 (fig. 1), and a lower housing (fig. 5), wherein said lens 1 is coupled to a

first end of said main housing 2 and said lower housing (fig. 1) is coupled to a second end of said housing. Therefore, it would have been obvious to a person having ordinary skill in the art of tire pressure monitors at the time the invention was made to modify the tire pressure device taught by Ballyns with a lens and housing assembly as taught by Chi for the purpose of clearly providing and alerting a pressure reading to a user (Chi col. 1 lines 46).

Regarding claims 3 and 11 Ballyns does not teach a screw cap that couples a lens to a housing. Chi teaches a screw cap 22 that couples a lens 1 to a housing 2 (fig. 1). It would have been obvious to a person having ordinary skill in the art of tire pressure monitors at the time the invention was made to modify the tire pressure device taught by Ballyns with a screw cap that couples a lens to a housing assembly as taught by Chi for the purpose of providing simple construction and inexpensive manufacturing (Chi col. 1 lines 49-51)

Regarding claims 4 and 12 Ballyns does not teach a conductive gasket that provides a seal. Chi teaches a conductive gasket 7 (abstract). It would have been obvious to a person having ordinary skill in the art of tire pressure monitors at the time the invention was made to modify the tire pressure device taught by Ballyns with conductive gasket as taught by Chi for the purpose of preventing leakage of fluids that are being transferred (Chi Col. 3 lines 10-20).

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Regarding claims 6,7,15 and 16 Ballyns does not explicitly teach what substance is used to fabricate the membrane, nor what type of conductive substance (conductive metal or rubber), However, since it appears that the membrane taught by Ballyns would appear to be metallic, it would have been obvious to a person having ordinary skill in the art to use a conductive metal or rubber, since it has been held to be within a general skill of a worker in the art select a known material on the basis of its suitability and intended use. In re Leshin, 125 USPQ 416. In this particular case lacking any criticality, it would appear to be well within the general practice of a person in the art to select any material readily available for the membrane based on undo experimentation which would determine the most optimum material that effectively assists in detecting tire pressure.

Claims 18-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ballyns in view of DeZorzi.

Regarding claim 18 Ballyns teaches all of the claimed features except a calibration function for the sensing device. DeZorzi teaches a calibration function 98 for the sensing device. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the tire pressure monitoring device taught by Ballyns with a calibration feature as taught bu Dezorzi for the purpose of correcting any errors in measurements that may occur during monitoring a tire device

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Regarding claim 19 Ballyns teaches allowing air from said tire to enter a counter-pressure chamber of said tire pressure monitoring device and sealing said counter-pressure chamber (col. 5 lines 54-58).

Regarding claim 20 Ballyns teaches pressure differential is a difference between the pressure of said counter-pressure chamber and said air pressure of said tire (col. 6 lines 20-35).

Regarding claim 21 Ballyns teaches said signaling means is coupled to a printed circuit board {fig. 2} and signaling means is selected from the group consisting of a light emitting diode (LED), a speaker, a radio frequency (RF) transmitter, and an infrared (IR) transmitter. {col. 7 lines 1-25} (claims 9 and 21)

Regarding claims 22 and 23 Ballyns in view of DeZorzi does not explicitly teach periodically removing the tire monitoring device and adding air into a tire after removal, it would have been obvious to one having ordinary skill in the art at the time the invention was made to not only make sure a detector is working, but also adding air into a tire once it is discovered that the pressure is low in order to ensure that the tire is properly inflated.

Conclusion

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andre J. Allen whose telephone number is 571-272-2174. The examiner can normally be reached on mon-fri 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Lefkowitz can be reached on 571-272-2180. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

André Allen
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Art Unit 2855


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